

**BRUHATH BANGALORE MAHANAGARA PALIKE
YELAHANKA DIVISION**

**ne of Work: Improvements & Asphaltting to Roads at Jayamuninagara in Kempegowda
rd No-01 of Yelahanka Sub Division.**

DETAILED ESTIMATE

Estimated Cost= 3200000.00

				Estimated Cost= 5200000.00					
No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	ROAD WORK								
1	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (KPWD SR 2018-19, Page No.143, Item No.19.14)								
		Cum							
	For Damage Porstion								
	1st A Main Road		1	5.00	2.00	0.20	2.00		
			1	2.00	2.00	0.20	0.80		
			1	3.00	2.00	0.20	1.20		
			1	1.50	1.50	0.20	0.45		
			1	2.00	2.00	0.20	0.80		
	Pipe Cutting Porstion		1	85.00	1.00	0.30	25.50		
	6th Cross Road		1	2.00	2.00	0.20	0.80		
			1	1.50	2.00	0.20	0.60		
			1	5.00	2.00	0.20	2.00		
			1	3.00	1.50	0.20	0.90		
	5th Cross Road		1	2.00	1.50	0.20	0.60		
			1	2.00	1.20	0.20	0.48		
			1	3.00	1.00	0.20	0.60		
			1	3.00	1.50	0.20	0.90		
	Pipe Cutting Porstion		1	28.00	1.00	0.30	8.40		
	2nd Main Road		1	3.00	2.00	0.20	1.20		
			1	2.50	2.00	0.20	1.00		
			2	3.00	2.50	0.20	3.00		
			1	3.00	1.50	0.20	0.90		
			2	2.50	2.00	0.20	2.00		
			1	3.00	2.00	0.20	1.20		
			2	5.00	1.50	0.20	3.00		
			1	1.50	1.50	0.20	0.45		
			1	2.00	2.50	0.20	1.00		
	Pipe Cutting Porstion		1	155.00	1.00	0.30	46.50		
	4th Cross Road		1	1.50	2.50	0.20	0.75		
			1	2.00	2.50	0.20	1.00		
			1	5.00	1.50	0.20	1.50		
			1	3.50	2.00	0.20	1.40		
	1st Main Road		1	3.50	2.00	0.20	1.40		
			1	2.50	1.50	0.20	0.75		
			2	2.50	3.00	0.20	3.00		
			1	3.00	2.00	0.20	1.20		
			2	2.50	1.50	0.20	1.50		
			1	2.50	2.00	0.20	1.00		
			2	6.00	1.50	0.20	3.60		

o	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
			1	1.50	1.50	0.20	0.45		
			1	2.00	2.50	0.20	1.00		
			1	216.00	1.00	0.30	64.80		
	Pipe Cutting Porstion								
	Reconstruction		1	134.00	5.00	0.45	301.50		
	1st A Main Road								
	Total Quantity						491.13	55.46	27238.07
	Rate Analysis								
	Basic Rate	41.00							
	Lead for 5Km (1.2x2x5)	12.00							
	Area Weightage @6%	2.46							
	Total Amount	55.46							
2	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.147, Item No.19.64)								
		Sqm							
	Reconstruction		1	134.00	5.00		670.00		
	1st A Main Road								
	Total Quantity						670.00	6.36	4261.20
	Rate Analysis								
	Basic Rate	6.00							
	Area Weightage @6%	0.36							
	Total Amount	6.36							
3	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (KPWD SR 2018-19, Page No.153, Item No.20.5)								
		Cum							
	For Damage Porstion		1	5.00	2.00	0.10	1.00		
	1st A Main Road		1	2.00	2.00	0.10	0.40		
			1	3.00	2.00	0.10	0.60		
			1	1.50	1.50	0.10	0.23		
			1	2.00	2.00	0.10	0.40		
	Pipe Cutting Porstion		1	85.00	1.00	0.10	8.50		
			1	2.00	2.00	0.10	0.40		
	6th Cross Road		1	1.50	2.00	0.10	0.30		
			1	5.00	2.00	0.10	1.00		
			1	3.00	1.50	0.10	0.45		
			1	2.00	1.50	0.10	0.30		
	5th Cross Road		1	2.00	1.20	0.10	0.24		
			1	3.00	1.00	0.10	0.30		
			1	3.00	1.50	0.10	0.45		
	Pipe Cutting Porstion		1	28.00	1.00	0.10	2.80		
			1	3.00	2.00	0.10	0.60		
	2nd Main Road		1	2.50	2.00	0.10	0.50		

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
		2	3.00	2.50	0.10	1.50		
		1	3.00	1.50	0.10	0.45		
		2	2.50	2.00	0.10	1.00		
		1	3.00	2.00	0.10	0.60		
		2	5.00	1.50	0.10	1.50		
		1	1.50	1.50	0.10	0.23		
		1	2.00	2.50	0.10	0.50		
		1	155.00	1.00	0.10	15.50		
Pipe Cutting Porstion								
		1	1.50	2.50	0.10	0.38		
4th Cross Road		1	2.00	2.50	0.10	0.50		
		1	5.00	1.50	0.10	0.75		
		1	3.50	2.00	0.10	0.70		
		1	3.50	2.00	0.10	0.70		
1st Main Road		1	2.50	1.50	0.10	0.38		
		2	2.50	3.00	0.10	1.50		
		1	3.00	2.00	0.10	0.60		
		2	2.50	1.50	0.10	0.75		
		1	2.50	2.00	0.10	0.50		
		2	6.00	1.50	0.10	1.80		
		1	1.50	1.50	0.10	0.23		
		1	2.00	2.50	0.10	0.50		
		1	216.00	1.00	0.10	21.60		
Pipe Cutting Porstion								
Reconstruction								
1st A Main Road		1	134.00	5.00	0.15	100.50		
Total Quantity						171.12	1994.92	341360.74
Rate Analysis								
Basic Rate		1882.00						
Area Weightage @6%		112.92						
Total Amount		1994.92						
4	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (KPWD SR 2018-19, Page No.155, Item No.20.18)							
		Cum						
For Damage Porstion								
1st A Main Road		1	5.00	2.00	0.15	1.50		
		1	2.00	2.00	0.15	0.60		
		1	3.00	2.00	0.15	0.90		
		1	1.50	1.50	0.15	0.34		
		1	2.00	2.00	0.15	0.60		
		1	85.00	1.00	0.15	12.75		
Pipe Cutting Porstion								
		1	2.00	2.00	0.15	0.60		
6th Cross Road		1	1.50	2.00	0.15	0.45		
		1	5.00	2.00	0.15	1.50		
		1	3.00	1.50	0.15	0.68		
		1	2.00	1.50	0.15	0.45		
5th Cross Road		1	2.00	1.20	0.15	0.36		
		1	3.00	1.00	0.15	0.45		

Sr	Description of work	Unit	Nos	Dimensions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Pipe Cutting Porstion		1	3.00	1.50	0.15	0.68		
			1	28.00	1.00	0.15	4.20		
	2nd Main Road		1	3.00	2.00	0.15	0.90		
			1	2.50	2.00	0.15	0.75		
			2	3.00	2.50	0.15	2.25		
			1	3.00	1.50	0.15	0.68		
			2	2.50	2.00	0.15	1.50		
			1	3.00	2.00	0.15	0.90		
			2	5.00	1.50	0.15	2.25		
			1	1.50	1.50	0.15	0.34		
			1	2.00	2.50	0.15	0.75		
	Pipe Cutting Porstion		1	155.00	1.00	0.15	23.25		
	4th Cross Road		1	1.50	2.50	0.15	0.56		
			1	2.00	2.50	0.15	0.75		
			1	5.00	1.50	0.15	1.13		
			1	3.50	2.00	0.15	1.05		
	1st Main Road		1	3.50	2.00	0.15	1.05		
			1	2.50	1.50	0.15	0.56		
			2	2.50	3.00	0.15	2.25		
			1	3.00	2.00	0.15	0.90		
			2	2.50	1.50	0.15	1.13		
			1	2.50	2.00	0.15	0.75		
			2	6.00	1.50	0.15	2.70		
			1	1.50	1.50	0.15	0.34		
			1	2.00	2.50	0.15	0.75		
	Pipe Cutting Porstion		1	216.00	1.00	0.15	32.40		
	Reconstruction								
	Ist A Main Road		1	134.00	5.00	0.20	134.00		
						Total Quantity	239.92	2001.28	480152.10
	Rate Analysis								
	Basic Rate	1888.00							
	Area Weightage @6%	113.28							
	Total Amount	2001.28							
5	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.6)								
		Sqm							
	For Damage Porstion								
	Ist A Main Road		1	5.00	2.00		10.00		
			1	2.00	2.00		4.00		
			1	3.00	2.00		6.00		
			1	1.50	1.50		2.25		
			1	2.00	2.00		4.00		
	Pipe Cutting Porstion		1	85.00	1.00		85.00		
	6th Cross Road		1	2.00	2.00		4.00		
			1	1.50	2.00		3.00		
			1	5.00	2.00		10.00		
			1	3.00	1.50		4.50		
	5th Cross Road		1	2.00	1.50		3.00		

No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
			1	2.00	1.20		2.40		
			1	3.00	1.00		3.00		
			1	3.00	1.50		4.50		
	Pipe Cutting Porstion		1	28.00	1.00		28.00		
	2nd Main Road		1	3.00	2.00		6.00		
			1	2.50	2.00		5.00		
			2	3.00	2.50		15.00		
			1	3.00	1.50		4.50		
			2	2.50	2.00		10.00		
			1	3.00	2.00		6.00		
			2	5.00	1.50		15.00		
			1	1.50	1.50		2.25		
			1	2.00	2.50		5.00		
	Pipe Cutting Porstion		1	155.00	1.00		155.00		
	4th Cross Road		1	1.50	2.50		3.75		
			1	2.00	2.50		5.00		
			1	5.00	1.50		7.50		
			1	3.50	2.00		7.00		
	1st Main Road		1	3.50	2.00		7.00		
			1	2.50	1.50		3.75		
			2	2.50	3.00		15.00		
			1	3.00	2.00		6.00		
			2	2.50	1.50		7.50		
			1	2.50	2.00		5.00		
			2	6.00	1.50		18.00		
			1	1.50	1.50		2.25		
			1	2.00	2.50		5.00		
	Pipe Cutting Porstion		1	216.00	1.00		216.00		
	Reconstruction								
	1st A Main Road		1	134.00	5.00		670.00		
	Total Quantity						1376.15	33.92	46679.01
	Rate Analysis								
	Basic Rate	32.00							
	Area Weightage @6%	1.92							
	Total Amount	33.92							
6	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.2)								
		Sqm							
	For Existing Surface								
	1st A Main Road		1	85.00	5.00		425.00		
	6th Cross Road		1	25.00	5.00		125.00		
	5th Cross Road		1	28.00	5.00		140.00		
	2nd Main Road		1	155.00	5.00		775.00		
	4th Cross Road		1	25.00	5.00		125.00		
	1st Main Road		1	216.00	5.00		1080.00		

No	Description of work	Unit	Nos	Dimensions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
10	Deduction for Primer Coat						-706.15		
							Total Quantity	1963.85	5.30
									10408.41
	Rate Analysis								
	Basic Rate	5.00							
	Area Weightage @6%	0.30							
	Total Amount	5.30							
7	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision - do - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (KPWD SR 2018-19, Page No.160, Item No.21.17.6)								
		Cum							
	For Pipe Cutting								
	1st A Main Road		1	85.00	1.00	0.05	4.25		
	5th Cross Road		1	28.00	1.00	0.05	1.40		
	2nd Main Road		1	155.00	1.00	0.05	7.75		
	1st Main Road		1	216.00	1.00	0.05	10.80		
	Reconstruction								
	1st A Main Road		1	134.00	5.00	0.05	33.50		
							Total Quantity	57.70	8545.72
									493088.04
	Rate Analysis								
	Basic Rate	8062.00							
	Area Weightage @6%	483.72							
	Total Amount	8545.72							
8	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.7)								
		Sqm							
	For Existing Surface								
	1st A Main Road		1	85.00	5.00		425.00		
	6th Cross Road		1	25.00	5.00		125.00		
	5th Cross Road		1	28.00	5.00		140.00		
	2nd Main Road		1	155.00	5.00		775.00		
	4th Cross Road		1	25.00	5.00		125.00		
	1st Main Road		1	216.00	5.00		1080.00		
	Reconstruction								
	1st A Main Road		1	134.00	5.00		670.00		
							Total Quantity	3340.00	12.72
									42484.80
	Rate Analysis								
	Basic Rate	12.00							

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
Area Weightage @6%	0.72							
Total Amount	12.72							

Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (KPWD SR 2018-19, Page No.162, Item No.21.78.12)

	Cum							
1st A Main Road		1	85.00	5.00	0.04	17.00		
6th Cross Road		1	25.00	5.00	0.04	5.00		
5th Cross Road		1	28.00	5.00	0.04	5.60		
2nd Main Road		1	155.00	5.00	0.04	31.00		
4th Cross Road		1	25.00	5.00	0.04	5.00		
1st Main Road		1	216.00	5.00	0.04	43.20		
Reconstruction								
1st A Main Road		1	134.00	5.00	0.04	26.80		
Total Quantity						133.60	9972.48	1332323.33
Rate Analysis								
Basic Rate	9408.00							
Area Weightage @6%	564.48							
Total Amount	9972.48							

10

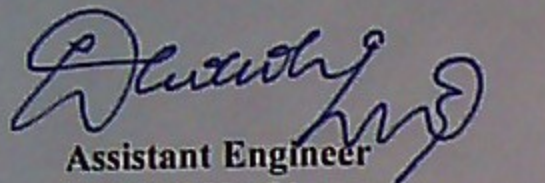
KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (KPWD SR 2018-19, Page No.182, Item No.24.15)

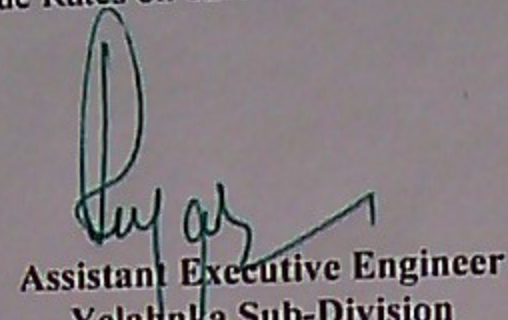
	Sqm							
Lane Marking								
1st A Main Road		2.5	85.00	0.10		21.25		
6th Cross Road		2.5	25.00	0.10		6.25		
5th Cross Road		2.5	28.00	0.10		7.00		
2nd Main Road		2.5	155.00	0.10		38.75		
4th Cross Road		2.5	25.00	0.10		6.25		
1st Main Road		2.5	350.00	0.10		87.50		
Total Quantity						167.00	454.74	75941.58
Rate Analysis								

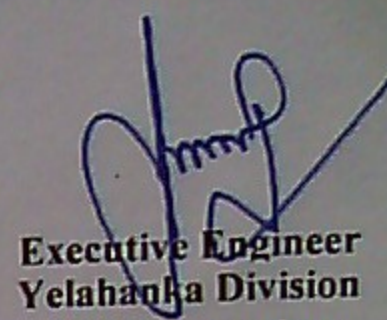
No	Description of work	Unit	Nos	Dimensions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Basic Rate	429.00							
	Area Weightage @6%	25.74							
	Total Amount	454.74							
Construction Total Amount									2853937.00
Add GST Charges 12%									342472.00
Sub Total									3196409.00
Miscellaneous and unforeseen charges etc.L.S									3591.00
Grand Total									3200000.00

Certificate:

1. The work spot has been inspected and found to be necessary
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of 2018-19 of Issue Rates on 02.11.2021

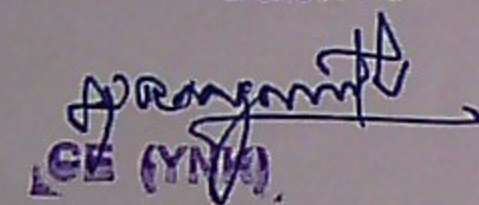

Assistant Engineer
Ward No-01
BBMP Bangalore


Assistant Executive Engineer
Yelahanka Sub-Division
BBMP Bangalore

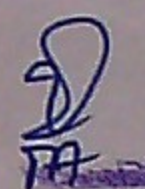
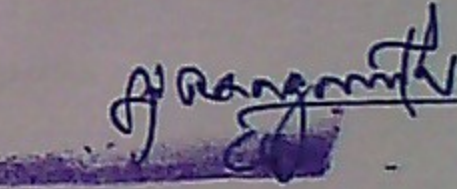

Executive Engineer
Yelahanka Division
BBMP Bangalore

Administrative Approval

Accorded For 32.00 Lakh.
Head of A/C 3726
CER NO : 65 Dt: 13/12/2021

 TA
 GE (YNA)

Technical Sanction
Accorded For 32.00 Lakh.
Head of A/C 3726
CER NO : 68 Dt: 13/12/2021

 TA
 GE (YNA)